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March 11, 2008

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Larry W. DePoorter et al

Group Art Unit: 1794

Serial No.: 09/446,807

Examiner: Patterson, Marc A., PhD

Filing Date: October 2, 2000

Attorney Docket No.: D-42716-01

Title: "PATCH BAG HAVING SEAL THROUGH PATCH"

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REPLY BRIEF UNDER 37 CFR § 41.37

Sir:

This Reply Brief is being filed in response to the Supplemental Examiner's Answer mailed 14 January 2008, i.e., on or before 14 March 2008. Entry of this Reply Brief and consideration of the Remarks set forth below are respectfully requested, with a view towards reversal of the various rejections of the claims.

I. Claims 2, 3, and 5-12 Are Not Anticipated by BRADY et al

Appellants' independent Claim 2 is directed to a heat-shrinkable patch bag having a heat-shrinkable bag to which is adhered a heat-shrinkable patch, with the patch bag having a seal through both the patch as well as the bag, with the sealed bag having a burst strength of at least 26 inches of water. Moreover, Appellants' Claims 3 and 5-12 depend, directly or indirectly, from Claim 2. The rejection of Claims 2, 3, and 5-12 should be reversed because the Office Actions have failed to show that the subject matter of Claim 2 is anticipated by BRADY et al.

In section 11 of the Supplemental Examiner's Answer mailed 14 January 2008, Claim 2, and dependent Claims 3 and 5-12, are rejected as anticipated by Brady et al (WO 96/00688). As pointed out above, Claim 2 recites the sealed bag as having a burst strength of at least 26 inches of water. While the Supplemental Examiner's addresses many of the features of Claim 2 and the various rejected dependent Claims 3 and 5-12, at no point does the Supplemental Examiner's Answer address the recited feature that the sealed bag has a burst strength of at least 26 inches of water. Without some statement showing how BRADY et al teaches or suggests or inherently exhibits this feature (and Appellants contend that BRADY et al does not teach or suggest or inherently exhibit this feature), Claim 2 has not been shown to be anticipated by BRADY et al. Moreover, no claim depending from Claim 2 has been shown to be anticipated by BRADY et al. This point has been argued in Appellants' Brief on Appeal, but has not been acknowledged in either the Examiner's Answer or the Supplemental Examiner's Answer.

Page 5 of the final Office Action of 3 June 2004 states that the recited burst strength of at least 26 inches of water is:

...indefinite because inches are not a known measure of strength. Furthermore, the size of the bag which contains the 26 inches is not claimed, or discussed in the specification, so that it is unclear what volume and weight of water the 26 inches of water corresponds to, or what pressure it corresponds to. The strength of the bag is therefore not clear from the claims or specification, and is assumed to be any strength for purposes of examination.

This excerpt from the final Office Action shows that the Examiner is ignoring the recited burst strength of at least 26 inches of water. Appellants' specification provides the following description of the test used to measure burst strength:

As used herein, the phrase "Standard Linear Ramp Hot Burst Grease Test" refers to a test in which a clean sealed bag has peanut oil applied to the seal area (brushed onto the seal on the inside of the bag only), after which the bag is inflated to a specified dwell pressure (12 inches of water) and the seal area is immersed in hot water at 182°F. Five seconds after immersion the pressure inside the bag is increased at the rate of 2 inches of water/second. The time to failure and burst pressure is a measure of seal strength. Test results are reported in seconds and inches of water pressure (IOWP). [Appellants' specification, Page 6 lines 21-27]

The volume of the bag is not critical to the test. The inches of water measurement is clearly a measurement of the internal pressure within the bag, i.e., the pressure to which the bag is inflated. The pressure could have been reported as pounds per square inch (i.e., psi), or millimeters mercury (i.e., mm Hg), but instead it is disclosed as inches of water. Clearly, the higher the internal pressure the bag will tolerate without rupture, the stronger the bag and seal must be. Thus, "...a burst strength of at least 26 inches of water" is not indefinite, and clearly corresponds to the pressure exerted by a hydrostatic head of water 26 inches high. Since pressure corresponds with strength, the recitation of "...a burst strength of at least 26 inches of water" corresponds with the strength of the bag and its seal. Contrary to the final office action and the Examiner's Answers, this feature cannot be ignored. Claim 2, and all claims dependent directly or indirectly therefrom, have not

been shown to be anticipated by BRADY et al. Moreover, this feature is not anticipated by BRADY et al.

**No Prima Facie Case of Obviousness Has Been Set Forth
for the Subject Matter of Claim 13**

The Supplemental Examiner's Answer reiterates the erroneous statement that BRADY et al discloses a bag in which the seal has a width of less than 13-17 inches, i.e., the width of the bag, and therefore that the width of the seal is readily determined through routine optimization. Thus, the Examiner is concluding that the disclosure of a bag width of 13-17 inches would have rendered it obvious to have utilized a seal having a width of from 0.015 to 0.25 inches!

Again, Appellants note for the record that the recitation of a seal width of from 0.015 to 0.25 inch in Claim 13 is a recitation of the width of the seal, not the length of the seal. The 13-17 inches of seal length across the bag in BRADY et al has nothing to do with the seal width recited in Claim 13. As such, it remains clear that no prima facie case of obviousness has been set forth for Claim 13.

**Claims 4, 13, and 14-23 Are Nonobvious
over the Prior Art of Record**

Appellants have stated, on the record, that the burst strength of their claimed bag is higher than the burst strength obtained without using the apparatus and process

Appellants have discovered for making a seal that is through both the bag and the patch.

More particularly, Appellants' specification states:

In the past, a through-bag-and-patch seal strength of only about 16 to 20 inches of water was obtained, measured via a Standard Linear Ramped Hot Burst Grease Test, described below. However, using the apparatus and process which Applicants' have discovered, surprisingly a through-bag-and-patch seal strength of from at least about 24 up to at least about 48 inches of water has been achieved, using the same test for seal strength. [Appellants' specification, Page 1 lines 27-32]

Appellants contend that this is evidence of the nonobviousness of the subject matter of rejected patch bag Claims 4 and 13. In addition, Appellants contend that this is evidence of the nonobviousness of process Claims 14-23. Appellants have demonstrated that applying heat using a first means for heating aligned with a second means for heating is capable of through-bag-and-patch seal strength of only about 16 to 20 inches of water was obtained, measured via a Standard Linear Ramped Hot Burst Grease Test, described below. However, using the apparatus and process which Applicants' have discovered, surprisingly a through-bag-and-patch seal strength of from at least about 24 up to at least about 48 inches of water has been achieved, using the same test for seal strength. Appellants contend that this is evidence of unexpected results that have been obtained in a claimed patch bag, using the process of Claim 14.

VI. Conclusion

Reconsideration of the patentability of the pending claims is respectfully requested, with a view towards reversal based on the remarks set forth above.

Respectfully Submitted,


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